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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 881,587	06 14/2001	John Werner Bulluck	IRIA 002	5873

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EXAMINER

SELLERS, ROBERT E

ART UNIT PAPER NUMBER

1712

DATE MAILED: 11/22/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. ²¹

09/881,587

Applicant(s)

BULLUCK ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-87 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 16-87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.

- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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The election with traverse of Group I in Paper No. 7 is acknowledged. The traversal is on the grounds that the distinctness between Groups I and II, Groups VI and VII, and Groups VIII and IX based on an intermediate-final product relationship is incorrect. This is not found persuasive because the intermediate of Group I without the additional acrylated polyester, γ -methacryloxypropyltrimethoxysilane or tris(ω -methoxyethoxy)silane loses its physical identity once cured. The cured intermediate of Group I, VI or VIII yields a materially different structure from the final product of Group II, VII or IX with the additional component which reacts upon curing and is physically incorporated into the cured final product which is structurally distinct.

Groups I, II, VI, VII, VIII and IX are properly classified differently and establishes an undue search burden.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7 and 16-87 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to non-elected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in Paper No. 7.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 and 8-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The word "or" in claim 1, line 6 should be amended to "and" to conform to the proper Markush language of "selected from the group consisting of . . . and."

There is no clear line of demarcation between the methyl methacrylate and insobornyl methacrylate in line 2 of claim 3 and the alkyl ester of methacrylic acid in line 6 since the former two methacrylates are encompassed by the latter generic term.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent No. 96,500.

The European patent (page 4, Example 1, line 25 to page 5, line 19) shows a two-part adhesive comprising Part 1 containing tetrahydrofurfuryl methacrylate, methacrylic acid, 1,3-butylene glycol dimethacrylate, an ethylene-methyl acrylate copolymer, benzoyl peroxide and 2,6-di-*t*-butyl-4-methoxyphenol, and Part 2 with the same monomers and copolymer along with N,N-dihydroxyethyl-*p*-toluidine and ferrocene.

The claimed antioxidant such as the hydroquinone of claim 8 is not exemplified. Page 3, lines 31-33 confirms the equivalency between the exemplified 2,6-di-*t*-butyl-4-methoxyphenol and the claimed hydroquinone.

It would have been obvious to employ the hydroquinone as the stabilizer of European '500 based on its equivalency with the exemplified 2,6-di-*t*-butyl-4-methoxyphenol. The hydroquinone stabilizer inherently further functions as an antioxidant because it is the same compound as the hydroquinone antioxidant required in claim 8.

The presence of the hydroquinone in both parts is not recited. It is a matter of ordinary skill in the art to incorporate the hydroquinone stabilizer of European '500 in both parts of the adhesive in order to stabilize the part containing the monomers and free radical initiator (i.e. benzoyl peroxide) and the part with the monomers and accelerator (i.e. *N,N*-dihydroxyethyl-*p*-toluidine).

Claims 1, 3-6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent No. 452,540 and Japanese Patent No. 53-144760 in view of European Patent No. 96,500.

European '540 and the Japanese patent disclose two-part adhesives wherein one part contains (meth)acrylate and dimethacrylate monomers and an organic peroxide, and the other part has the same monomers with *N,N*-dimethyl-*p*-toluidine.

The claimed antioxidant in both parts is not recited. It would have been obvious to add the hydroquinone stabilizer of European '500 into both parts of the two-part adhesives of European '540 and the Japanese patent in order to stabilize each part.

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Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1, 3-6 and 8-15 above, and further in view of Edelman et al.

The claimed thickener, thixotrope or adhesion promotor of claim 2 is not recited. Edelman et al. sets forth a two-part adhesive prepared from a first part of (meth)acrylate monomers or oligomers, chelating agent, a hydroperoxide and ferric ions, and a second part of a substituted dihydropyridine second part (col. 2, lines 43-57). Additives including thickeners, adhesion promotors and thixotropic agents are suitable (col. 4, lines 6-12).

It would have been obvious to include the thickener, adhesion promotor or thixotropic agent of Edelman et al. to the two-part adhesives of European '500 and '540 and the Japanese patent in order to optimize the adhesive or rheological properties.

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Robert Sellers
Primary Examiner
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11/20/02